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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/899,608	07/05/2001	Genichi Kimizuka	211A 3139	4063
7590 05/27/2004				
KODA & ANDROLIA Suite 1430 2029 Century Park East Los Angeles, CA 90067-3024		EXAMINER VAN PELT, BRADLEY J		
		ART UNIT 3682 PAPER NUMBER		

DATE MAILED: 05/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/899,608

Applicant(s)

KIMIZUKA, GENICHI

Examiner

Bradley J Van Pelt

Art Unit

3682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3 and 4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3 and 4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bunch, Jr. (USPN 5,400,672) in view of Sakamaki (USPN 6,070,484).

Bunch, Jr. discloses a gear having a plurality of teeth formed around an outer periphery thereof with each of said plurality of teeth having front and rear facing surfaces and a top, wherein at least one groove (14) is defined along an entire outer peripheral surface of each tooth of said teeth, said at least one groove being provided in said outer peripheral surface of each of said front and rear facing surfaces and said top of each of said plurality of teeth and in a valley provided between each successive ones of said plurality of teeth;

the groove is formed at substantially the center in the widthwise direction of the teeth;

Bunch, Jr. does not disclose the gear is made of resin, a substantially cylindrical rim, a boss formed about a rotation center of said rim, and a web connecting said boss and said rim to each other, a plurality of said grooves are provided along the outer surface of the teeth.

Sakamaki shows a gear made of resin, a substantially cylindrical rim, a boss formed about a rotation center of said rim, and a web connecting said boss and said rim to each other.

To modify the apparatus of Bunch, Jr. so as to form the gear of resin and utilize the above design features would have been obvious to one of ordinary skill in the art at the time the

Art Unit: 3682

invention was made in view of the teachings of Sakamaki that such an arrangement improves the weight of the device and accommodates shrinkage.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include a plurality of grooves, since it has been held that mere duplication of the essential working parts of a device only involves routine skill in the art.

Response to Arguments

4. Applicant's arguments filed March 3, 2004 have been fully considered but they are not persuasive.

The applicant argues that the Bunch reference does not anticipate claim 1, specifically that the groove does not extend through the front and rear surfaces, tops, valleys of each tooth. In Bunch, the groove 14 is provided in the front and rear surfaces, top, and valley of each tooth. The applicant points out the groove 14 in Bunch effectively separates the integral gear into two separate gears. Nonetheless, the groove in Bunch extends through each of the surfaces the applicant has defined in claim 1, because material is missing at each of the claimed surfaces and forms a groove.

The applicant also argues that the Bunch reference and the instant invention are different in terms of function. The applicant has not positively claimed any type of function, thus no weight is given to this distinction.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 3682

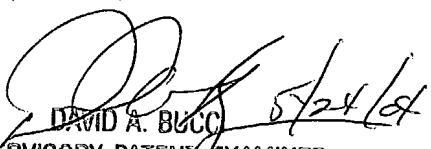
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradley J Van Pelt whose telephone number is 703.305.8176. The examiner can normally be reached on M-Th 7:00-4:30, 2nd F 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A Bucci can be reached on 703.308.3668. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BJVP 


DAVID A. BUCCI 5/24/09
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600